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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/654,567 | 08/29/2003 | Steven J. Eck | 01-05 | 5069 |

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| EXAMINER |
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CHARLES, MARCUS

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| ART UNIT | PAPER NUMBER |
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3682

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/654,567

Applicant(s)

ECK, STEVEN J.

Examiner

Marcus Charles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-29-2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is the first action relating to serial application number 10/654,567 filed 08-29-2003, which has been entered. Claims 1-23 are currently pending.

Election/Restrictions

1. Applicant's election without traverse of species I (Idler pulley) to claims 1-22 in the reply filed on 10-12-2005 is acknowledged.

Drawings

2. The examiner has accepted the drawing filed with this application as formal drawing.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 3-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 3, it is not clear as to how the polymeric material can be polyamide, phenolic resin, epoxy resin, polyester, polyurethane, high density polyolefin, or a blend thereof all at the same instance. It appears that the material consists of one of these materials.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by McCutchan, Jr. (4,468,210). McCutchan, Jr. discloses a pulley having a body (80), and a bearing carrier insert (86) forming a central hub which has inner and outer circumferential surfaces, and housing a bearing member (85) and the outer race of the bearing is circumferentially adjacent the inner circumferential surface of the bearing.

7. Claims 1-5, 8-9, 11, 13-14, 15-17 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Speer (4,366,609). Speer (4,366,609) Speer discloses an idler pulley comprising a body (24), with a pulley receiving peripheral shape (20), a tubular insert (12), the insert forming a central hub along the perpendicular axis of the pulley body, the hub having an inner circumferential surface and an outer circumferential surface.

In claims 2-3, Speer discloses the pulley body is manufactured from a moldable polymeric material, which is phenolic resin.

In claims 4-5, Speer discloses the polymeric can be a polyamide (col.2, lines 34-55) and in claim 5, Speer discloses the insert is manufactured from aluminum

In claim 8, note Speer disclose the moldable material includes a reinforcing agent which is fibrous glass (col. 2, lines 54-55).

In claim 9, Speer discloses the use of high-density polyethylene.

In claim 11, Speers discloses the use of fibrous glass, which is glass fiber.

In claims 13-14, note the metal coating (18). The metal is coated before being

formed in an aluminum sleeve (46).

In claim 15-17, Speers discloses the claimed invention (see col. 2, lines 56-67).

In claim 22, note the locking portion (26).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speer in view of JP (02-202928). Speers fails to disclose the type of polyamide is nylon. It is well now in the art that nylon is an organic base in polyamide that produces high resistance to temperature and good resistant to abrasion. JP (02-202928) discloses a that polyamides such as nylon 6, and nylon 12 is suitable because of their high melting point and highly crystalline structure, Therefore, it would have been obvious to one of ordinary skill in the art to use a polyamide consisting of the group including nylon 6 or nylon 12 in view of JP (02-202928) in order to produce high temperature resistance and good resistant to abrasion.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Speer in view FR (1,595,346). Speer fails disclose that one of the modifier, filler, and reinforcing agent and adhesion promoter is of a group consisting of Talc or mica. FR (1,595,346) discloses that it is known in the art to use Talc or mica as reinforcing filler in moldable plastics so as to increase strength and produce good abrasion. Therefore, it would

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have been obvious to one ordinary skill in the art at the time of the invention to use talc or mica as a reinforcing agent in the moldable plastic of Speer as disclosed by DE (1,595,346) so as to increase strength and produce good abrasion.

11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Speer in view of EP (0 856,675). Speer fails to disclose the insert is coated with brass. It is well known to coat steel with brass in order to reduce corrosion and reduce the adverse effects atmospheric contamination. EP (0 856,675) discloses a hub (17) is coated with brass. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to coat the insert of Speer with brass as disclosed by EP (0 856,675) brass in order to reduce corrosion and reduce the adverse effects atmospheric contamination.

12. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCutchan, Jr. in view of Hoffmann et al. (4,046,432). McCutchan, Jr. discloses the claimed invention except for the hub including means for locating the bearing member during assembly. Hoffmann et al. discloses a bearing member (23) fitted within a central hub, wherein the hub includes a location means (37/47/57), which is a detente that is allowed to lock the rotational movement of the bearing, retaining relative axial movement and to facilitate proper alignment between the bearing in the hub. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pulley of Speer so as to include a location means in view of Hoffmann et al. in order to lock the rotational movement of the bearing, retaining axial movement and to facilitate proper alignment of the bearing in the hub.

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13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Speer in view of Hoffmann and McCutchan, Jr. and Speer discloses the claimed invention above but does not disclose a one or more bearing members locating means and a bearing member fitted in the hub. Hoffmann discloses the bearing member locating means as in paragraph 12 above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pulley of Speer so as to include a location means in view of Hoffmann et al. in order to lock the rotational movement of a bearing, retaining axial movement and to facilitate proper alignment of the bearing in the hub. In addition, McCutchan, Jr. discloses the bearing member fitting in the hub as in paragraph 6 above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to fit a bearing member in the hub of Speer as disclose in order to reduce friction.


Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arai (5,797,819), Delancy (4,177,585), Zollondz et al. (6,432,343) discloses a plastic pulley with reinforcements. M^cGaughey (3,520,747) and Takatsu (6,482,140) disclose a plastic roller. JP (62-252436) discloses a moldable plastic comprising polyamide base nylon6 and nylon 66.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Marcus Charles
Primary Examiner
Art Unit 3682
October 28, 2005